



September 27, 2007

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: ET Docket 04-186

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this is to notify you that on September 26, 2007, Stu Overby and the undersigned, of Motorola, had meetings with Renee Crittendon, legal advisor to Commissioner Adelstein and Wayne Leighton, legal advisor to Commissioner Tate regarding the above captioned proceeding.

During the meeting we discussed the attached presentation related to use of television white space.

Pursuant to the Commission's Rules, one copy of this notice is being filed electronically with the Commission. If you require any additional information please contact the undersigned at (202) 371-6953.

Sincerely,

/s/ Steve B. Sharkey

Steve B. Sharkey, Director
Director, Spectrum and Standards Strategy

Cc: Renee Crittendon
Wayne Leighton

Attachment



Adopting a Successful TV Whitespace Regulatory Framework

September 26, 2007

Recipe for TVWS Success

■ Protect Incumbent Operations

- Licensed TV
- Licensed Part 90 operations in channels 14-20
- Ad hoc Part 74 auxiliary broadcast operations licensed by rule
- Authorized wireless microphones, to the extent possible

■ Meet User Needs

- Maximize spectrum access within necessary protection requirements
- Accommodate both enterprise business and consumer needs
- Enable fixed, mobile and portable use
- Minimize potential for interference to CATV wiring/set-top boxes for in-home TVWS uses

■ Enable “Future-Proof” TVWS Deployment

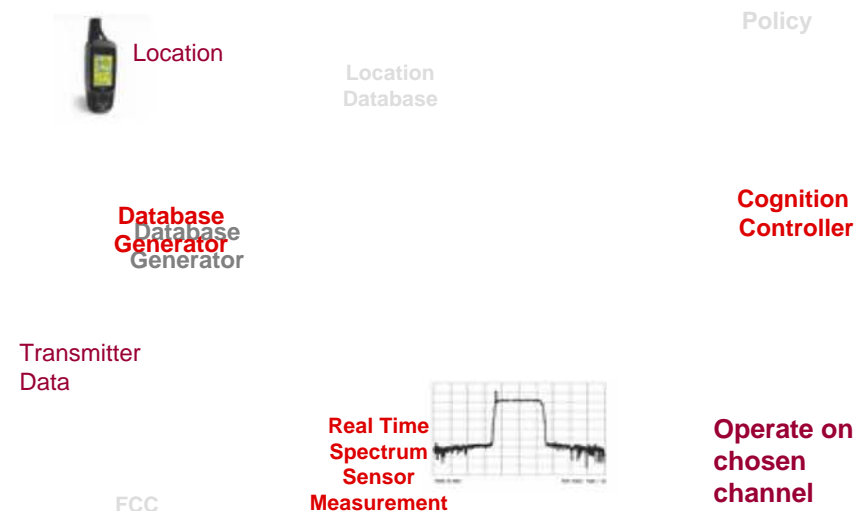
- Provide for mechanism to adjust deployed TVWS devices as environment changes and market gains real world experience

Geolocation Provides Protection of Incumbent Users

How it Works (1):

- TVWS Access Point (AP) determines location;
- TVWS AP runs Geolocation program to determine allowable channels and power;
- TVWS AP senses and selects the highest quality channel within the options allowed; and
- TVWS AP sends control signal and beacon to client device.

Geolocation program is loaded with protection parameters per rules. Can be updated to “Future Proof” devices.



Geolocation Provides Protection of Incumbent Users

How it Works (2):

1. Client looks for a TVWS radio system beacon and control signal;
2. Client validates and associates with system;
3. Host streams video (data) to client;
4. Periodically client receives updated channel list from Access Point



Source Host
Computer



TVWS Radio - AP



TVWS Radio - Client



Receiver Host
Computer

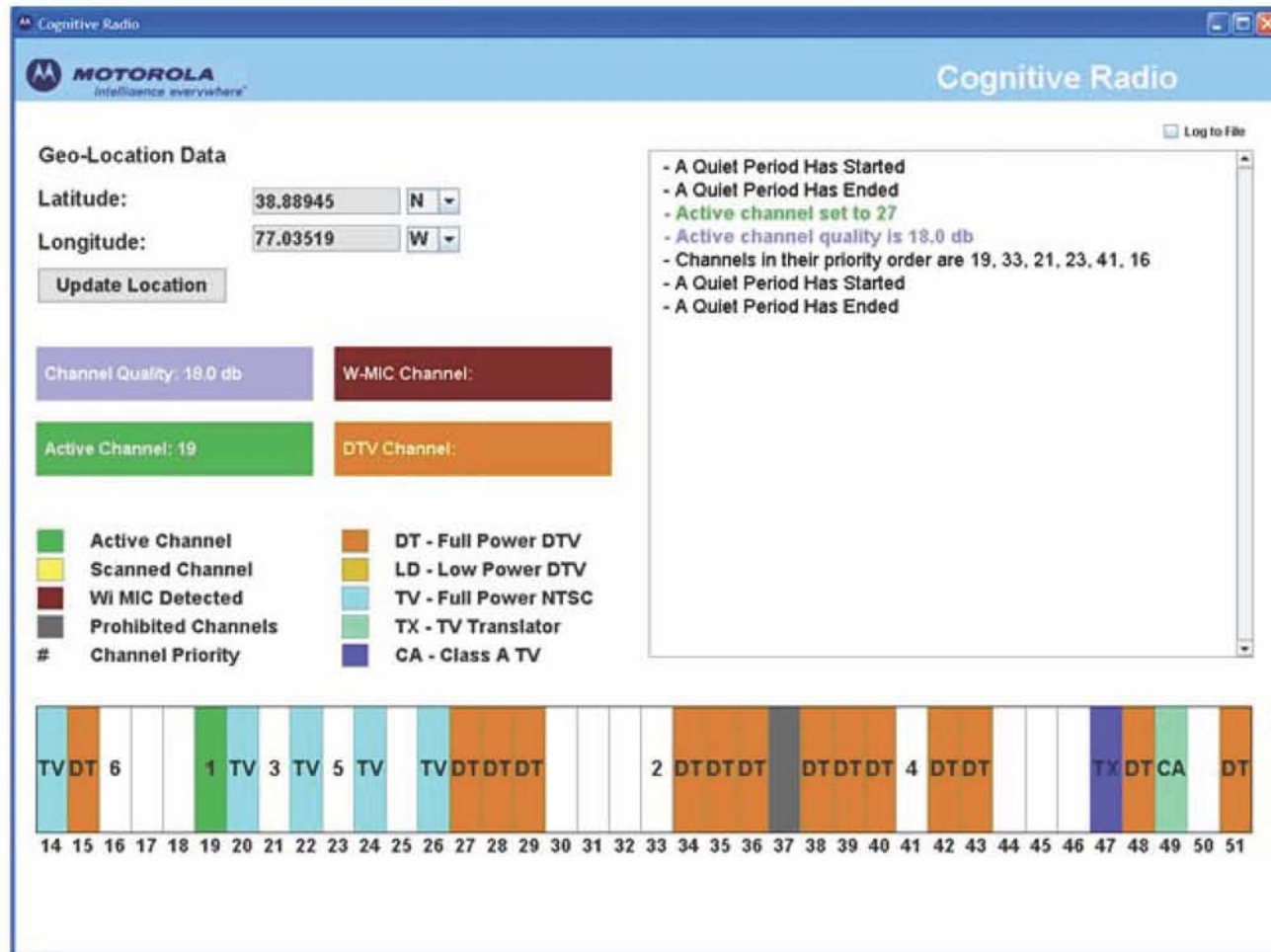
- Geolocation improves integrity of protection
- Geolocation process is completed in a fraction of a second
- Device memory required is nominal and inexpensive- approx. 1 MB

Sample Geolocation Results

Ability to
change
location

Recent
Activity

Legend



Historical
activity
messages

Current
channel
status

Recommendations

■ **Require geolocation for TVWS devices > 10 mW**

- Provides highest level of protection to incumbents
- Database can be updated to reflect evolving environment or specialized protection

■ **Prohibit any devices without geolocation in CH 14-20**

- Minimizes potential for interference to public safety and critical users

■ **Provide for 3rd party administration of data base**

- Allows Part 74 ad hoc operations and wireless mikes at major events to be added to database and protected for duration of event
- Allows protection for unique situations (e.g. cable head ends receiving distant signals)

■ **Require high power TVWS users to register and be added to database**

- Enables greater integrity for unlicensed operations and provides record if interference did occur

■ **Allow 4 watts power for fixed and mobile systems with geolocation**

- Provides useful power level for both rural broadband and most enterprise environments

■ **Limit power of in-home TVWS devices to 10 mW**

- Minimizes ingress of TVWS signals into CATV set-tops/wiring

■ **Require all devices to include sensing**

- Provides additional level of protection
- Facilities sharing among devices

■ **Require all devices to detect beacon signal**

- Provides additional protection and control of TVWS devices
- Enables protection for short term uses by incumbents or devices with higher regulatory priority